

# MANAGING A CRIPPLED SCIENCE AND TECHNOLOGY EDUCATION FOR SELF-RELIANCE ECONOMY IN THE 21<sup>ST</sup> CENTURY.

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## ABSTRACT

*Today meaningful improvement of the standard of living of a country's citizens bears a close relationship with the level of science and Technology advancement of the country. It has been observed that the economic as well as the political environment in Nigerian is not conducive for the growth of science and technology. This paper stresses on the management of science and technology education for self-reliance economic in the 21<sup>st</sup> century. The problem inherent in the Nigerian economic were look into finally conclusions were drawn and recommendation made to ensure that the political as well as the economic environment are made conducive for the growth of science and technology to improve the standard of living of the populace.*

## INTRODUCTION

Development today, poses a challenge and presents an opportunity. Urgent reflection and action are needed for our very survival is at stake (Dube, 1988). The survival of the nation and her growth is determined by her advancement in science and technology (Akpata, 1996). Science is defined as the branch of study that is concerned with observation and classification of facts and especially with the establishment or strictly with the quantitative formulation of verifiable general laws chiefly by induction and hypothesis (Websters, 1971). While technology is defined as the mastery and utilization of manufacturing and industrial methods, systematic application of knowledge to practical tasks in industry. (Oyeyinka, 1999). Nations are eager to make history, or to allow themselves and their entire civilization to be wiped off the face of the earth. As a developing, nation, Nigeria enters the new century with great aspiration, with enormous experience, with great potential, and a bulk of human and natural resources. The choice is there to make history or decline, to pay the prize of true freedom or slump into self-imposed slavery of dependency (Anyebe, 1996). Our strategy for a self-reliant advancement in science and technology should be all embracing. Today, meaningful improvement of the standard of living of a country's citizen bears a close relationship with the level of science and technology advancement of the country. Industrialization has become synonymous with the power status of the nation. The voice of science and technology as catalysts in industrialization cannot be over-emphasized.

### THE EXPERIENCE SO FAR:

There has been a lot of inaction on Nigeria's technological program so far. Policy makers seem to be paying little attention in laying a solid foundation for sustainable growth in science and technology. Since independence, the Nigeria science and technology landscaped has continued to witness uncoordinated management. The policy strategies adopted has no significant effort on engineering a sustainable and durable culture of science and technology development. The problem is actually lack of visionary management on the part of decision makers. A close look at the various science and technology policies, and types of management strategies adopted indicated that the Nigerian science and technology program is badly managed in spite of the enormous resources, both human and materials. Although the various national development-planning efforts were targeted at providing a strong and dynamic science and technology base, the implementation stage is always bedeviled with inconsistencies and incoherencies. Today Nigerians experience no visible improvement in their standard of living in spite of their country's enormous potentials. There has also been a near absence of national will to face the problem sincerely and squarely (Ezekwe, 1987).

Perhaps, attempts have been made long ago to provide technological infrastructure, enough building of technical colleges, Universities of technology, and research institutes. Iron and steel industry, steel rolling mills, the petrol-chemical industries, the aluminum smelter just to mention a few. Nevertheless, planning has not been along the line of an orderly technological development, hence, they are not effective to usher in the much-desired technological break-through. As a result of misplaced priority, a lot of money is spent on imported goods from other countries, irrelevant things that cannot lead to any meaningful technological development.

### SCIENCE AND TECHNOLOGY EDUCATION FOR SELF RELIANT ECONOMY

Today, the yardstick for measuring underdeveloped nations is purely the performance of the economy. Countries with developing or poor economy are classified as third world due to their poor per capital income.

One of the problems facing Nigerian is poor economy. Our economy is not diversified. There are no industries to meet our need, Thus, there is need for industrial revolution. Industrial revolution can be achieved only through the application of effective science and technology education, which will ultimately turn around the fortune of our economy. Amamize (1996) declared that science and technology education will turn economic doom to boom, employees to employers, importers to exporters and scarcity to abundance.

The New National Policy on Education, otherwise known as the 6-3-3-4 system which has generated much reaction from various circles, is a bold and well-meaning attempt by the government to re-orientate school curricula such that the schools would be in a better position to graduate students who possess relevant skills, and hence can satisfy the manpower needs of the economy. The thrust towards achieving relevance in the New National policy on Education is reflected by the technical and vocational bias of the secondary school curriculum and by the scientific and technological thrust of the university education. The push to achieve relevance and self-reliance in the economy is not confined to Nigeria. Examples abound across the world of efforts made toward

making school curricula relevant to life in the society. In Tanzania, the Arusha declaration (Nyerere, 1967) provided the direction for education levels. The declaration solicits education for self-reliance and recommends that primary education should not only be complete in itself but should also be community-based.

Similarly, effort was also made in the United Kingdom in the 1960s and early 1970s to make science curricula more responsive to children's and special needs. (Yusuf, Amamize and Adeniran (1999).

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## CONCLUSION

It will suffice to say that science and technology benefits which were manifest during the industrial revolution that swept Europe in the 18<sup>th</sup> century, is a phenomenon that cannot be wished away. It must be embraced by all nations that wish to achieve economic advancement. There is a clear indication that in Nigeria; there are no signs of human progress. Most well-intended policies deviated from their target. There is observable trend of inconsistency in policy and practice of science and technology that has not allowed a significant improvement in our standard of living.

The political and economic environment in Nigeria is not conducive for the growth of science and technology. Also, the national consciousness towards development is absent. There is the need for citizens to imbibe the culture of hard work and change their psychic and attitude. Also, science and technology management should be seen as a comprehensive approach at policy coordination, both in design and implementation so that satisfactory trends in various economic variables could put the economy on the arduous journey towards sustained technological achievement in the 21<sup>st</sup> century.

## RECOMMENDATION

Based on the findings of the study, the following recommendations are made:-

- Government should launch a campaign that will direct the nation's focus on the acquisition of science and technology education.
- Government should channel more resources to science and technology education as well as the productive sector of the economy in order to improve the living standard of its citizenry.
- Higher institutions, research institutions should be well equipped by government and support agencies (i.e. UNESCO, UNDP, etc) to enable them discharge their functions effectively.
- Government should articulate its policies and programs properly and ensure effective and efficient implementation of science and technology program for the industrial growth of the nation.
- The political and economic environment of the country should be made more friendly, to ensure unlimited growth of science and technology spectrum for economic independence and increase of the standard of living.

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